

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,405	06/23/2000	Kirkland W. Vogt	5014	9008
25280 7	7590 12/26/2002			
MILLIKEN & COMPANY 920 MILLIKEN RD PO BOX 1926			EXAMINER	
			BEFUMO, JENNA LEIGH	
SPARTANBURG, SC 29304				
			ART UNIT	PAPER NUMBER
			1771	
			DATE MAILED: 12/26/2002	81

Please find below and/or attached an Office communication concerning this application or proceeding.

			#S-8			
	Application No.	Applicant(s)				
	09/602,405	VOGT ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jenna-Leigh Befumo	1771				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet	with the correspondence addres	s			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may y within the statutory minimum of t vill apply and will expire SIX (6) M , cause the application to become	a reply be timely filed hirty (30) days will be considered timely. ONTHS from the mailing date of this commur ABANDONED (35 U.S.C. § 133).	nication.			
1) Responsive to communication(s) filed on 30.5	September 2002 .					
2a)⊠ This action is FINAL . 2b)□ Th	is action is non-final.					
3) Since this application is in condition for allowated closed in accordance with the practice under Disposition of Claims			erits is			
4)⊠ Claim(s) <u>1 and 22-41</u> is/are pending in the app	olication.					
4a) Of the above claim(s) 1 is/are withdrawn from	om consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>22-41</u> is/are rejected.						
7) Claim(s) is/are objected to.	Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine						
10)☐ The drawing(s) filed on is/are: a)☐ accep						
Applicant may not request that any objection to the						
11) The proposed drawing correction filed on		disapproved by the Examiner.				
If approved, corrected drawings are required in rep 12) The oath or declaration is objected to by the Ex-	•					
	anner.					
Priority under 35 U.S.C. §§ 119 and 120		0.440(-) (1) - (0)				
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C	. 9 119(a)-(a) or (t).				
a) All b) Some * c) None of:	s boyo boon received					
	 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 					
Copies of the certified copies of the prior application from the International But	ity documents have bee	n received in this National Stag	е .			
* See the attached detailed Office action for a list						
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C	c. § 119(e) (to a provisional app	lication).			
a) ☐ The translation of the foreign language pro15)☐ Acknowledgment is made of a claim for domesti	• •					
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of	v Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152				

Application/Control Number: 09/602,405 Page 2

Art Unit: 1771

DETAILED ACTION

Continued Prosecution Application

1. Receipt is acknowledged of the request for a Continued Prosecution Application (CPA) filed on September 30, 2002, under 37 CFR 1.53(d) based on Application No. 09/602,405. However, because the application was filed after May 29, 2000, no CPA has been established.

Response to Amendment

- 2. Amendment A, submitted as Paper No. 6 on September 30, 2002, has been entered. Claims 2 21 have been cancelled. Claims 22 41 have been added. Therefore, the pending claims are 1 and 22 41. Claim 1 is withdrawn from consideration as being drawn to a nonelected invention.
- 3. The rejections to claims 2-21, set forth in the previous Office Action, are rendered moot by the cancellation of those claims.
- 4. Additionally, it is noted that 37 CFR 1.111 (b) requires that the Applicant's response must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. While the Applicants responded to the previous Office Action by canceling claims and adding new claims, the Applicant in the future must also include arguments that point out how the pending claims are distinguished over the prior art as well as responding to every ground of objection or rejection in the previous Office Action.

Election/Restrictions

5. Applicant's election of Group II, the coated article, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Application/Control Number: 09/602,405

Art Unit: 1771

Drawings

Page 3

6. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

Claim Rejections - 35 USC § 102

- 7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 8. Claims 22 27 and 30 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Hayashi et al. (4,109,038).

Hayashi et al. discloses a raised woven fabric comprising an elastic polymer coating (abstract). The coating would inherently be partially incorporated into the woven fabric. The woven fabric can be a satin weave (column 6, lines 1-8). The woven fabric is raised before the elastomeric polymer is applied to the fabric(column 6, lines 46-51). The polymer is applied to the back-side of the surface, or the surface which has the lower amount of raised fibers, if both sides have undergone the raising process (column 7, lines 1-3). The warp yarns can be natural materials such as cotton and have a denier from 50 to 300, which is equivalent to a cotton count of 17-106 (column 5, lines 49-67). The weft yarn has a total denier of 50 to 500, or 10-106 denier (column 3, lines 41-43). As shown in example 1, the woven fabric has 70 warps/inch and 56 wefts/inch. Therefore, claims 22-27 and 30-33 are anticipated by Hayashi et al.

9. Claims 22 - 25, 27, 30, 31, and 34 - 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Parker (4,171,391).

Parker discloses producing a composite by impregnating a porous sheet with polyurethane (abstract). At least a portion of the porous sheet material in impregnated with the polyurethane

Art Unit: 1771

coating (column 3, lines 22 - 24). The coating material is made elastomeric by the addition of long chain polyol (column 5, lines 67 - 68). The porous substrate can be a woven, knit, felt, or non-woven material (column 7, lines 28 - 31). Suitable fibers include natural, cotton fibers (column 7, lines 31 - 32). Parker teaches that woven substrate formed from cotton staple yarns and having a basis weight of 8 oz./yd² can be used as the substrate (column 7, lines 61 - 65). In the examples the woven fabric is produced has a 60x80 count (column 12, lines 19 - 20). The fabric is napped before being coated with the polyurethane coating (column 8, lines 3 - 7). Finally, since the fabric samples are coated by dipping as shown in the examples, the technical back of the fabric would inherently be coated. Therefore, claims 22 - 25, 27, 30, 31, and 34 - 36 are anticipated.

10. Claims 22 – 25 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Taguchi et al. (4,741,075).

Taguchi et al. discloses an artificial substrate material which comprises a fibrous sheet and a binder (abstract). The fibrous sheet material can be a woven sheet (column 3, lines 26 - 31). The fiber used in the woven sheet material can be natural fibers such as wool or cotton (column 3, lines 35 - 40). The binder is an elastomeric polymer which can be sprayed, coated or impregnated onto the fibrous sheet uniformly and allowed to penetrate into the fibrous sheet (column 4, lines 11 - 50). Taguchi et al. teaches that the fibrous sheet is compressed before coating to give the synthetic leather a dense feel. Since the determination of patentability of a product is based on the structural limitations of a product and not dependent on the method limitations, the compressed fibrous substrate taught by Taguchi et al. would have the same condensed structure as Applicant's calendared fabric. Therefore, claims 22 - 25 and 29 are rejected.

11. Claims 22, 37, and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa (6,103,047).

Ogawa discloses a three-dimensional molded body comprising a urethane elastomer with a backing material on one side of the elastomer and a surface material on the other side of the elastomer (abstract). The surface material, which corresponds to the Applicant's first material, can a woven fabric sheet (column 4, lines 48 - 51). The urethane elastomer layer corresponds to the Applicant's second material. The woven surface material will inherently be partially impregnated by the elastomer layer since the layers are fixed together using pressure (column 4, lines 25 - 29). The backing material, which corresponds to the Applicant's third material, is a plastic film (column 5, lines 18 - 19). Thus, claims 22, 37, and 40 are anticipated.

Claim Rejections - 35 USC § 103

- 12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 13. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker.

The features of Parker have been set forth above. Parker fails to teach the cotton count of the warp and weft yarns used in the woven fabric. However, Parker teaches that the choice of substrate and its construction can be made based on the basis of cost, end-use requirements, and other considerations known in the textile and coated fabrics industries (column 7, lines 37 – 41). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to claimed cotton count, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Therefore, claims 32 and 33 are rejected.

14. Claims 34 – 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. in view of Parker.

The features of Hayashi et al. and Parker have been set forth above. Hayashi et al. fails to teach the basis weight of the woven support fabric. Parker is drawn to artificial leather materials made from coated elastomeric fabrics. Parker discloses that while the choice of fabric construction is based on the end-use requirements and price, a woven fabric with a basis weight of 8 oz/yd² is a satisfactory substrate for the substrate material. Therefore, it would have been obvious for one having ordinary skill in the art to choose a woven fabric with a basis weight of 8 oz/yd² as taught by Parker for the coated substrate in the Hayashi et al. invention since the fabrics have similar end-uses and constructions. Further, as set froth above, that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. Therefore, claims 34 – 36 are rejected.

15. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parker in view of Hayashi et al.

The features of Parker and Hayashi et al. have been set forth above. Parker fails to teach using a satin construction for the woven substrate in the coated material. Hayashi et al. is drawn to artificial leather materials made from coated elastomeric fabrics. Hayashi et al. discloses that the satin weave construction is especially preferred in the coated woven substrate because the fabrics have a good appearance and properties as a suede-like fabrics (column 6, lines 1-9). Therefore, it would have been obvious for one having ordinary skill in the art to choose a satin weave as the weave pattern for the woven porous substrate in the Parker invention since the satin weave produces a good appearance and good properties when used as a suede-like fabric. Thus, claim 26 is rejected.

16. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker or Hayashi et al. in view of Taguchi et al.

Art Unit: 1771

The features of Parker, Hayashi et al., and Taguchi et al. have been set forth above. Parker and Hayashi et al. fail to teach compressing the fabric substrate before adding the elastomeric coating. Taguchi et al. is drawn to an artificial leather substrate. Taguchi et al. teaches compressing the fibrous substrate prior to applying the elastomeric coating to increase the density of the fabric and improve the feel of the synthetic leather. Therefore, it would have been obvious for one having ordinary skill in the art to compress the fibrous substrate of Parker or Hayashi et al. prior to adding the coating to increase the density of the fabric. Further, compressing the fabric prior to adding the polymeric coating would control the porosity of the fibrous substrate and control the amount of polymeric coating which penetrates into the surface of the substrate. Therefore, claims 28 and 29 are rejected.

17. Claims 37 – 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parker or Hayashi et al. in view of Borri et al. (5,277,969).

The features of Parker and Hayashi et al. have been set forth above. Parker discloses that the artificial leather material can be used in various end-products such as shoe uppers, upholstery, clothing, luggage, book binding and other applications (column 1, lines 27 - 30). Also, Parker teaches that the artificial leather substrate may be combined in laminated structures with foams and fabrics (column 9, lines 35 - 41). However, Parker and Hayashi et al. fail to teach that the elastomer coated substrates can be bonded to a felt substrate, a flocked substrate, a metallic substrate, or a polymeric film. Borri et al. is drawn to artificial leather substrates. Borri et al. discloses that imitation leather materials can be used to form laminates with one or more functional substrates (column 1, lines 25 - 29). A functional substrate is defined as a separately prepared substrate such as a knitted or woven fabric, expanded polymer foam, waterproofing films, paper, etcetera (column 1, lines 30 - 34). Thus, it would have been obvious to one having ordinary skill in

Art Unit: 1771

the art to laminate one or more additional layers, such as a woven or knitted fabric, or a film layer, to the artificial leather material taught by Parker or Hayashi et al. to produce various end-products and reinforce or modify the properties of the artificial leather material. Thus, claims 37, 40, and 41 are rejected.

Additionally, it would have been obvious to one having ordinary skill in the art to choose a felt fabric, a flocked fabric, or a metallic substrate as the material laminated to the artificial leather, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Choosing the felt or flocked fabric would produce products with added texture and improved bulk and hand properties. While, the metal substrate would provide a vapor barrier layer to prevent moisture from passing through the laminate or the metallic substrate could act as a support layer to increase the rigidity of the laminate structure for various end-uses such as automobile trim. Therefore claims 38 and 39 are rejected.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

Application/Control Number: 09/602,405

Art Unit: 1771

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo December 17, 2002

TERREL MORRIS
SEPERVISORY PATENT EXAMINER
JECHNOLOGY CENTER 1700

Page 9